

AMENDMENTS TO CLAIMS

Claims 1 through 52 (cancelled).

Claims 53 – 85 (withdrawn).

86. (new) Apparatus for performing chemistry reactions in a plurality of reaction vessels in conjunction with a liquid handler of the type having a plurality of individual liquid dispensing means arranged in a pattern, said apparatus comprising a base defining an insert-receiving space, said insert-receiving space being situated in operative registration with the liquid dispensing means of the liquid handler, and in combination therewith, first and second inserts alternatively insertable into said insert-receiving space in said base, each of said inserts comprising a plurality of individual reaction vessel-receiving recesses arranged in a different array, each of said reaction vessel-receiving recesses in each of said insert recess arrays being aligned with a different one of the liquid dispensing means of the liquid handler when the insert is received in said insert-receiving space in said base.

87. (new) The apparatus of claim 86 wherein each of said first and second inserts comprises a reaction vessel-receiving recess array with a different number of vessel-receiving recesses.

88. (new) The apparatus of claim 86 wherein the vessel-receiving recess array in said first insert comprises recesses of a different size than said recesses in the reaction vessel-receiving recesses in said second insert.

89.(new) The apparatus of claim 86 further comprising a plate mounted above said base, said plate comprising a plurality of openings, each of said openings being aligned with a different one of said reaction vessel-receiving recesses in the insert received in said insert-receiving space in said base.

90. (new) The apparatus of claim 86 wherein at least one of said inserts comprises 48 vessel-receiving recesses.

91. (new) The apparatus of claim 90 wherein each of said recesses is adapted to receive a reaction vessel with a 11.6 mm diameter.

92. (new) The apparatus of claim 86 wherein at least one of said inserts comprises 24 vessel-receiving recesses.

93. (new) The apparatus of claim 92 wherein each of said recesses is adapted to receive a reaction vessel with a 17 mm diameter.

94. (new) The apparatus of claim 86 wherein at least one of said inserts comprises 9 vessel-receiving recesses.

95. (new) The apparatus of claim 94 wherein each of said recesses is adapted to receive a reaction vessel with a 24 mm diameter.

97. (new) The apparatus of claim 86 wherein at least one of said inserts comprises 6 vessel-receiving recesses.

98. (new) The apparatus of claim 97 wherein each of said recesses is adapted to receive a reaction vessel with a 34 mm diameter.

99. (new) The apparatus of claim 86 wherein each of said vessel-receiving recesses in each of said inserts comprises a substantially conical portion.

100. (new) The apparatus of claim 86 wherein each of said vessel-receiving recesses in each of said inserts comprises a substantially semi-circular portion.

101. (new) The apparatus of claim 86 wherein each of said vessel-receiving recesses in each of said inserts comprises an opening proximate the bottom of said recess.

102. (new) The apparatus of claim 89 wherein said base comprises a temperature control fluid channel.

103. (new) The apparatus of claim 102 further comprising a temperature control fluid source and means for connecting said source and said channel.

104. (new) The apparatus of claim 103 further comprising a temperature control module adapted to be interposed between said plate and said base.

105. (new) The apparatus of claim 86 wherein said first insert comprises a thermo-couple receiving opening.

106. (new) The apparatus of claim 86 further comprising an insert extraction tool having a protrusion, wherein said first insert comprises a protrusion receiving opening.

107. (new) The apparatus of claim 106 wherein said tool comprises means for changing said protrusion between an expanded state, to frictionally engage said protrusion receiving opening, and a non-expanded state, to disengage said opening.

108. (new) The apparatus of claim 107 wherein said protrusion is normally in the expanded state.

109. (new) The apparatus of claim 107 wherein said protrusion is normally in the non-expanded state.

110. (new) The apparatus of claim 109 further comprises means for maintaining said protrusion in the non-expanded state.

111. (new) The apparatus of claim 86 wherein said inserts can be inserted into said insert-receiving space in said base in only a single orientation.

112. (new) The apparatus of claim 86 wherein each of said inserts comprises first and second rounded corners, each of said corners having a different radius.

113. (new) The apparatus of claim 112 wherein said insert-receiving space comprises first and second rounded corners, each of said corners of said space having a radius that corresponds to the radius of a different one of said corners of each of said inserts.

114. (new) The apparatus of claim 86 wherein said base comprises a wall defining said insert-receiving space and a bottom surface, said wall being inclined relative to a line perpendicular to said bottom surface of said base by a given amount.

115. (new) The apparatus of claim 86 wherein each of said inserts comprises a side wall and a bottom surface, said side wall being inclined relative to a line perpendicular to said bottom surface of said insert by a given amount.

116. (new) The apparatus of claim 115 wherein each of said inserts comprises a side wall and a bottom surface, said side wall being inclined relative to a line perpendicular to said bottom surface of said insert by a given amount.

117. (new) The apparatus of claim 116 wherein the amount of inclination of said wall of said base and the amount of inclination of said side wall of said insert are substantially equal.

118. (new) The apparatus of claim 117 wherein the amount of inclination of said wall of said base and the amount of inclination of said side wall of said insert are each approximately one degree.

119. (new) The apparatus of claim 86 wherein each of said inserts has a side wall with an outwardly extending lip adapted to rest on said base when said insert is received in said space.

120. (new) The apparatus of claim 86 further comprising magnetic stirrer means and a magnetic stirrer bar situated within one of the reaction vessels received in one of the recesses in one of said inserts, said bar being longer than the diameter of the vessel in which said bar is received.